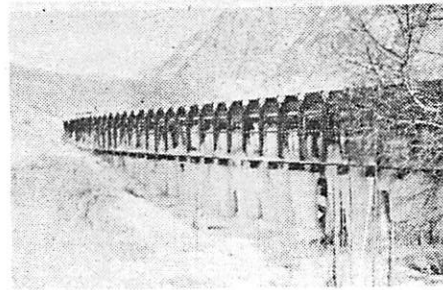
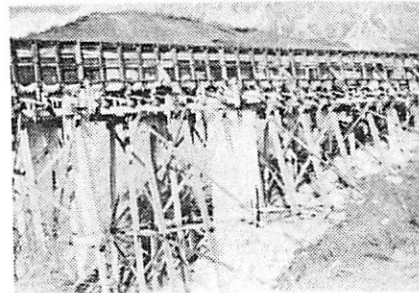


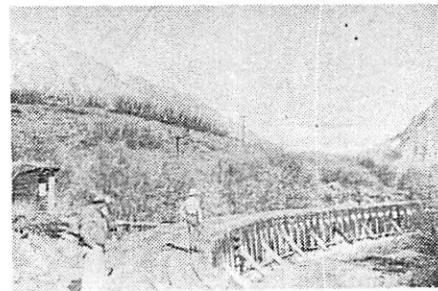
feet of summer water. We'd have to go down and pull [the bulkheads] out, even in the night and make preparations for this two hundred-second feet of extra water. Then the flume would already be soaked up for it was only a little ways from the lower side of either sand gate, or I mean bulkhead. And we had twenty of those to take out.



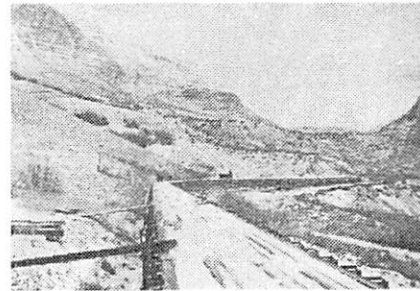
Ice Conditions at Ring Stations 421-427 Looking Southeast



Ice Condition on "Peach Tree Trestle" (No. 2 Siphon Area, Rings 352-364) Looking Southeast



Chief of Party, John E. Mackay and Crew Running Centerline Survey and Old Flume at Ring Station 544



Inspection Tour of Old Flume by Engineers of Utah Power and Light Company and Morrison-Knudsen Co. and Olson Mfg. Co. View East

Photos of Olmsted Flume in Provo Canyon, 1948, just Prior to replacement by pipeline.

Now here's something for you to figure out, when you get ready. There's twenty of them and one day the superintendent hired a couple of men to go up there and mark them from the top of the flume to the tunnel. The flume goes into a tunnel down from there into a head house and then from there down to the turbines into the power company power plant that made the electricity. So he told them to go up and start to the top and work down to the tunnel and number every bulkhead, which they did. They had paint to put the numbers on each bulkhead. Then they got down to the tunnel and started to measure back up on the opposite side so they'd be marked on both sides. And what do you think? Ten isn't half of twenty. If you think so, you try to figure that out. Now I'll leave it up to you to figure out. I'm not a gonna tell you because I was sent down to pull a number ten one night and I went down and pulled number ten. The next day the superintendent came up over the flume and wanted to know why I didn't do what I was told. I said, "I did." And he said, "I know you didn't. I'll show you that there's not a bulkhead pulled out at ten." So I said, "All right, we'll walk down that far and see." So we went down. And I said, "Now here's number ten. Now there's the boards that I was told to pull out." "Well," he said, "How come there's number ten down there?" And I said, "Because ten isn't half of twenty, that's how come." So there's a problem for you girls, if you want to work it out.

Oakum is a preparation of seaweed that has been tarred with light pine tar like they macadamize roads with now, only it's not as dense and not as black and not as thick. It's been refined; some of the tar taken out of it and it's water resistant. When the water hits it, it swells and stops the leak. Now that's about what the composition of oakum is and plumbers use it in pouring vents and sewer lines. They caulk the sewer lines with that so that the lead they melt and put in there can't run on and waste and run off down into the sewer. And the same way when they put the vent up through the ceiling of a house. It has to be caulked so the smell or the perfumes from the sewer line don't come back up into the buildings.

The oakum was always cut in about eighteen-inch lengths and then we had cement bags and we'd just fix them so they'd fit just like a nose bag on a horse. Then we'd carry the oakum in there and we had what was called a caulkin' knife. Just a bolt flattened out on the opposite end from the head and made square across, like cuttin' off the end of a case knife and then we would drive the oakum in with that. And if you've never done it, don't do too much of it until your palm of your hand gets a callous and gets hard. Your hand will swell up on the front and it will swell up on the back and you'll have to do it with the opposite hand for a few days until you get your hand back in condition again. Or if you caulk,